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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,296	02/23/2004	Marionito Castillo Figueroa		2295

39640 7590 06/22/2006

MARIONITO C. FIGUEROA
10 WHEATON GROVE
SCARBOROUGH, ON M1J 3L5
CANADA

EXAMINER

KAPLAN, HAL IRA

ART UNIT	PAPER NUMBER
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2836

DATE MAILED: 06/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

EK

Office Action Summary

Application No.

10/708,296

Applicant(s)

FIGUEROA ET AL.

Examiner

Hal I. Kaplan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) 3 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. A substitute specification in proper idiomatic English and in compliance with 37 CFR 1.52(a) and (b) is required. The substitute specification filed must be accompanied by a statement that it contains no new matter.
2. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are: "the op-amp chip ... switching operation" (see paragraph 3, lines 6-7); "block 1 circuit ... controller" (see paragraph 6, lines 2-3); "a NPN transistor ... disable device" (see paragraph 8, lines 4-6); "otherwise, the output ... power application" (see paragraph 9, lines 13-15); "causes a low ... common terminal" (see paragraph 10, lines 3-4); "both relays ... common terminal" (see paragraph 11, lines 1-7); "this condition ... power relay" (see paragraph 11, lines 13-15); "the amplified ... sync signal" (see paragraph 16, lines 9-11); "therefore, the timer ... fully closed" (see paragraph 16, lines 23-26); "a disconnected ... ground potential" (see paragraph 20, lines 13-19); "the anode ... trigger signal" (see paragraph 21, lines 18-22); "the diode D17 ... input I terminal" (see paragraph 22, lines 9-11); "this causes ... resume closing" (see paragraph 23, lines 11-20); and "amplifier that convert ... waves signal" (see paragraph 24, lines 3-4).

3. The disclosure is objected to under 37 CFR 1.71(b) because it does not completely describe a specific embodiment of the invention.

Paragraph 10, lines 1-3 state that the connection between the OUT pin of U1 and the input INA pin was previously described in the specification, but this connection was not previously mentioned. Paragraph 19, line 5 states that the anodes of diodes D6 and D7 are connected to the same place. This is not correct, as Figure 1 clearly shows that the anode of diode D6 is connected to a junction formed by the input 2D of U3, the output 1Q, and the input INB of U4, whereas the anode of diode D7 is connected as described. There is no written description of Figure 2.

4. The disclosure is objected to under 37 CFR 1.73 because it does not include a brief summary of the invention.
5. The disclosure is objected to under 37 CFR 1.77(b)(6) and (b)(7) because it does not include a section describing the background of the invention or a brief summary of the invention.
6. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT

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- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (f) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

Drawings

- 7. The drawings are objected to because of the following informalities: a portion of Block 2 in Figure 1 is cut off at the left side of the page, and some of the reference numerals in Figures 1 and 2 are too small to be read.
- 8. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "c1", "c2", "1", "2", and "3" have been used for all relays, and it is sometimes unclear which relay(s) is/are being referred to.
- 9. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: U5, Q, and D in Figure 1 (see paragraph 16, line 8 and paragraph 17, lines 1-2).

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10. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: H, R8, and R12 in Figure 1, and BT1 and F1 in Figure 2. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Oath/Declaration

11. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It was not executed in accordance with either 37 CFR 1.66 or 1.68. An S-signature must be inserted between forward slash marks, and a registered practitioner must supply his/her registration number as part of or immediately below the S-signatures. See 37 CFR 1.4(d)(2).

Claim Objections

12. The claims are objected to under 37 CFR 1.75(f). The claims must be numbered consecutively in Arabic numerals, and each claim should be a single complete sentence in proper idiomatic English. There should be only one period per claim. See the claims of the US patent to Bishop (6,664,888), as an example of proper claim drafting. It is not clear how many claims there are, or where they begin and end. For this Office Action, paragraphs c1-c6 have been considered claim 1, paragraph c7 has been considered claim 2, and paragraph c8 has been considered claim 3.

13. Claims 2 and 3 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims c7 and c8 are dependent from claims 1 and 2, but there are no claims numbered 1 and 2.

14. Claim 3 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim must refer to other claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claim has not been further treated on the merits and has been withdrawn from consideration.

15. Claims 1 and 2 are objected to because of the following informalities: Claims 1 and 2 refer to letters used to designate terminals. Designations and labels carry no patentable weight. Accordingly, the terminal designations have not been given any patentable weight. Paragraph c2, line 1 contains the phrase "Timer-switch". It appears this should be "timer-switch". Paragraph c2, line 2 contains the phrase "transistor,

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resistor, diode, and capacitor". It appears this should be "transistors, resistors, diodes, and capacitors". Paragraph c3, line 3 contains the phrase "switch power". It appears this should be "switch a power". Paragraph c3, line 4 contains the phrase "between factory". It appears this should be "between a factory". Paragraph c3 line 6, the phrase "the factory disconnect switch" lacks proper antecedent basis. Paragraph c4, line 1 contains the word "Sequential". It appears this should be "sequential". Paragraph c4, lines 1-2 contain the phrase "multiple flip-flops chip". It appears this should be "chip comprising multiple flip flops,". Paragraph c4, line 2 contains the phrase "diode, resistor, capacitor". It appears this should be "diodes, resistors, and capacitors". Paragraph c4 line 4, the phrases "the positive terminal" and "the dc source" lack proper antecedent basis.

Paragraph c5, line 1 contains the phrase "Pulse Generator". It appears this should be "pulse generator". Paragraph c5, line 4 contains the phrase "Sync-sensor". It appears this should be "a sync sensor". Paragraph c6, line 1 contains the word "Sync-sensor". It appears this should be "sync-sensor". Paragraph c6, line 2 contains the phrase "resistor and capacitor". It appears this should be "resistors and capacitors". Paragraph c7, line 1 contains the word "Timer-switch". It appears this should be "timer-switch". Paragraph c7, lines 2-3 contain the phrase "diode and resistor". It appears this should be "diodes and resistors". Paragraph c7, line 4 contains the word "use". It appears this should be "used". Paragraph c7, line 5 contains the phrase "and has a". It appears this should be "and a". Paragraph c7, line 6 contains the phrase "sending

power-off". It appears this should be "sending power-off". Appropriate correction is required.

Claim Rejections - 35 USC § 112

16. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

17. Claims 1 and 2 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

The claim(s) are narrative in form and replete with indefinite and functional or operational language. The claims must be numbered "1, 2, 3, ...", not "c2, c3, c4, ...". It is not clear to the examiner how many claims there are, or where each claim begins and ends. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only.

18. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships are: the connection(s) between the "multiple flip-flops chip" and the "chip of power drivers".

19. Claims 1 and 2 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "a chip of power drivers" in paragraph c4, line 3. It

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is not clear to the Examiner what is meant by "a chip of power drivers". Claim 2 inherits this deficiency. In addition, the relationships between the different circuits and systems are unclear.

20. Claims 1 and 2 recite the limitation "said circuit" in paragraphs c5-c7. There is insufficient antecedent basis for this limitation in the claim. It is not clear which circuits are being referred to in claims c5-c8.

Conclusion


21. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The US patent to Saito et al. (6,528,899) discloses a similar circuit.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal I. Kaplan whose telephone number is 571-272-8587. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 571-272-2800 x36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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